



Study of Socio-Economic Condition of E-Rickshaw Pullers in Gondia City

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Abstract :

e-rickshaw pullers are generally comes from the socially and economically deprived class. The socio-economic conditions of these strata need to be improved. The socio-economic condition of e-rickshaw pullers need to be study to improve the socio-economic condition of e-rickshaw pullers. This paper focuses on the socio-economic conditions of e-rickshaw pullers in Gondia City.

Keywords : socio-economic conditions, e-rickshaw pullers,

Introduction :

India has made a remarkable progress in different sectors of the economy since last three decades. However, the benefit could not percolate to bottom level. However, different strategies have been made from time to time to improve the economic status of poor and population engaged in unorganized sector, but their conditions are still unsatisfactory (Ali 2009). People who belong to lower segment of the society, their deterioration continue day by day particularly in rural masses where More than 70% population resides. Unemployment, illiteracy, unhygienic health conditions and discrimination regarding distribution of resources and assets is common (Ali 2012, Madan 1971). A big segment of the rural population migrates to the urban centres for earning income and livelihood (Bhatt 1989). But, due to lack of money, education, industrial skills, these immigrated rural people especially, victims of natural calamities (flood, drought) as well as socio-religious factors could not find employment in the formal sector and other related sectors (Charles 2002). Finally, they prefer the business of rickshaw pulling to get quick cash earning and employment. It is the fact that now rickshaw pulling has become a popular source of income and employment among the rural immigrants in the urban masses (Begum and Binayak 2004). Ever-growing population and urban population growth add a new dimension in urban areas.

“Electric rickshaws also known as e-rickshaws have been becoming popular in the Gondia city recently and is an alternative to pulled rickshaws because of their low fuel cost, and less human effort compared to pulled rickshaws. They are also being widely accepted as an alternative to petrol, diesel auto rickshaws for shorter distance as the cost of running is cheaper and people tend to prefer the same.

Electric rickshaws have been becoming more popular in some cities since 2008 as an alternative to auto rickshaws and pulled rickshaws because of their low fuel cost, and less human effort compared to pulled rickshaws. They are being widely accepted as an alternative to petrol/diesel/CNG auto rickshaws.

The erickshaws comparatively have greater advantage than the general rickshaws as they have higher number of seat capacity along with a fuel free and pollution free mode of transportation, there is no adverse effect on health like the general rickshaws has on the rickshaw pullers. But at the same time, it has higher maintenance cost and high investment. Due to this complicacy it is necessary to understand the condition of these e-rickshaw drivers in terms of their socioeconomic status, different financial facilities available to them, satisfaction level. It is complicated to determine how this new means of livelihood create changes in the life of the e-rickshaw drivers. In order to determine how this new means of livelihood create changes a detailed study of the secondary sources of literature was done before framing the structured questionnaire. Singh, (2014) in the paper entitled “A study of the battery operated E- rickshaws in the state of Delhi”, studied the socio-economic impact and the technical characteristics to make a case of regularisation of erickshaw in the state. Further an attempt was made to understand the role of the industry in urban employment and income generation, and the various problems that affect system.

Dutta and Das, (2014) in the paper entitled “Development of an effective hybrid tricycle”, highlight the existing model and design of tricycle rickshaws. The effort was directed to design a lightweight, high strength and economic both human pulled and electric powered hybrid rickshaws. Khan (2010) in the paper entitled “Socio-economic profile of cycle rickshaw pullers, A case study”, tried to analyse the socio-economic characteristics of cycle rickshaw pullers and to find out the cause of rickshaw pulling .The adverse effects of this profession on health of the rickshaw pullers, the problem faced by them and their remedial measures have been also taken into account. The study is based on primary data collected through the field survey and direct questionnaire to the respondents in Aligarh city. Sharma, (2011) in his case study on Rickshaw Bank highlighted on how Rickshaw Bank collects money and provides finance to rickshaw pullers so that they can own their respective rickshaws. Rajvanshi (2002) paper entitled “Electric and improved cycle rickshaw as a sustainable transport system for India” explains the need of the need of the battery operated vehicles. It explains the existing cycle rickshaw scene and also explains the commercial, technical and policy issues related to the CNG powered vehicles. Bose, (2014) article entitled “Cheap rides, low costs: it’s Tuk-Tuk time in

Tripura” tries to elaborate the advantages of erickshaw, it also shows how the e-rickshaw create impact in the society. Rajvanshi (2014), in the paper entitled “History of electric rickshaws at NARI” elaborated the revolution of technology that is used in rickshaws, it describes the history of electronic rickshaws and development of other battery operated technologies.

Based on vehicle, the **Indian electric rickshaw** motor and controller market is categorized into **e-auto**, retrofitted **rickshaw**, and **battery rickshaw**. Among these, in 2018, the **battery rickshaw** motor category held the largest sales volume share of 95.6% in the market.

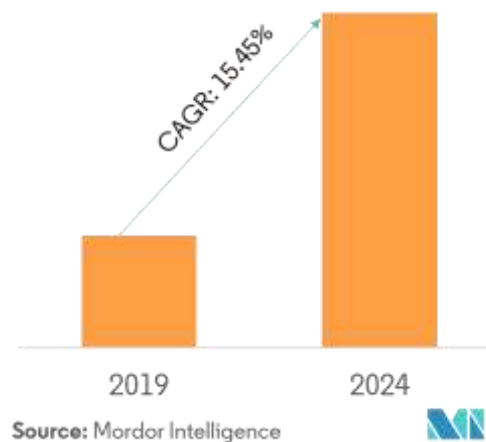
India electric rickshaw market has been segmented by Carrier Type (Passenger Carrier, and Load Carrier), by Motor Type (Less than 1,000 W, 1,000-1,500 W and Greater than 1,500 W), By Battery Capacity (Equal and Less than 100 Ah and Greater than 100 Ah) and by Geography (South India and North India).

Market Overview

India electric rickshaw market is expected to register a CAGR of 15.45%, during the forecast period, 2019-2024.

- With growing awareness on environment pollution, government incentives towards e-mobility and implementation of stringent emission norms have been few factors driving the market.
- Battery-powered rickshaw has been replacing cyclic rickshaw predominantly in North India, majorly across Uttar Pradesh, West Bengal, Delhi, and Bihar. In 2018, India had registered nearly 350 thousand unit sales, growing at an average rate of 20% annually since 2015.
- The intensity of competition in the market is high due to the presence of many regional players.
- Lack of charging infrastructure and battery-swapping stations across nationwide have been hindering the potential growth of EVs in the country. As of 2018, India had nearly 425 publicly available charging points. However, by 2022, government and private efforts are expected to boost the charging infrastructure to approximately 2,800 charging points.

India Electric Rickshaw Market Summary



Prime Minister Narendra Modi’s administration now is pivoting toward promoting EVs in public transportation and fleet operations – primarily, two- and three-wheelers, taxis and buses. The Ministry of Finance is finalising a plan to spend about 40 billion rupees (\$600 million) in the next five years to improve the nation’s charging infrastructure and subsidize e-buses.

The impact of electrification on India’s automobile industry

Due to escalating urbanization come ecological challenges because of high levels of vehicle pollution. To contest this, governments globally declared convention on emissions and efficiency that are anticipated to become stern in times to come. For India, fossil fuels import account for a major segment of the current account deficit and also create reliance on certain global province to full fill it need for fuel. With increasing electrification coming into sight, so it becomes the obvious area for future Research and development in the form of alternate fuel vehicle like battery-powered electric vehicles, hybrid electric vehicles, and plug-in hybrid electric vehicles could be avenues of exploration. According to NITI Aayog report, India can easily save 64 percent of energy demand for road transport and 37 percent of carbon emissions by 2030 by practicing and pushing a common, electric and connected transportation future. The automotive industry is already feeling the effects of electrification or e-mobility, both globally and in India The evolution to EVs could be very nippy in India. As already observed in developed countries like the US and Germany, around 30% to 45% of vehicle purchasers do consider electric vehicles as a choice while buying a car. By 2030, EVs could garner a sizeable share-which can go up to 50 percent in case of path breaking developments of commuter vehicle sales in key global territories.

This inclination could affect the automotive industry in numerous scenarios. This can result into overlapping of different verticals of value chain, majorly impact the cost structure and cause to be a few apparatuses superseded. For e.g., electric motor used in EV's will eventually drive down demand for major components used in fossil fuel vehicles like engines and transmission system. This will push original equipment manufacturer and part vendors to seek options outside their current work culture. Uncultivated areas like electric motors and powering solutions like battery services will surface as more pertinent and striking. Automobile corporations could profit from bearing in mind electrification as an opening to undertake leap of faith into newer horizons of value addition.

Electric mobility is coming and it is coming to stay and will have a deep impact over the world and India. One thing can be surely predicted that it is going to attract lots of new players in automobile sector and will hit the last nail in coffins of many existing players. Emission Norms: -Indian government neither has stricture nor it implements the stricter emission norms. Strict government regulations on emission norms can be a major influencing factor for advent of electric vehicles in India and worldwide. The industry is now struggling to comply with lower CO2 emission norms over the next decade, the only way out is through the use of alternate fuel powered vehicles. Not denying the fact that EV diffusion will create reliance on import of new supplies and component from abroad, but under the make in India campaign more and more home grown suppliers with technological alliance with foreign companies can eventually provide necessary parts and technical know-how for cost effective production of EVs.

Conclusion

The rickshaw pulling is a small-scale local means of transportation having three wheels. They are often used to carry passengers by negotiated fare and widely used in major cities of the all regions of India for shorter distance. Rickshaw pulling provides an essential income and employment for the poor (Kishwar 2009). Being the cheapest means of transportation for the short distance, it gets popularity in the urban localities of Indian Cities. Though rickshaw pulling is a symbol of poverty, it provides bread and livelihood in majority of the socio-economic backward people who partly or solely depend on this profession.

The government and stake holders in manufacturing hybrid and electric vehicle should have to consider the factors to plan their strategies to meet the expectation of the Indian metro customers. The different facilities should be given to rickshaw pullers so that their socio-economic conditions of them. Government also provide e-rickshaw to poor in subsidized rate also.

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